MODULE VIII: Post-treatment Issues

Breast Reconstruction

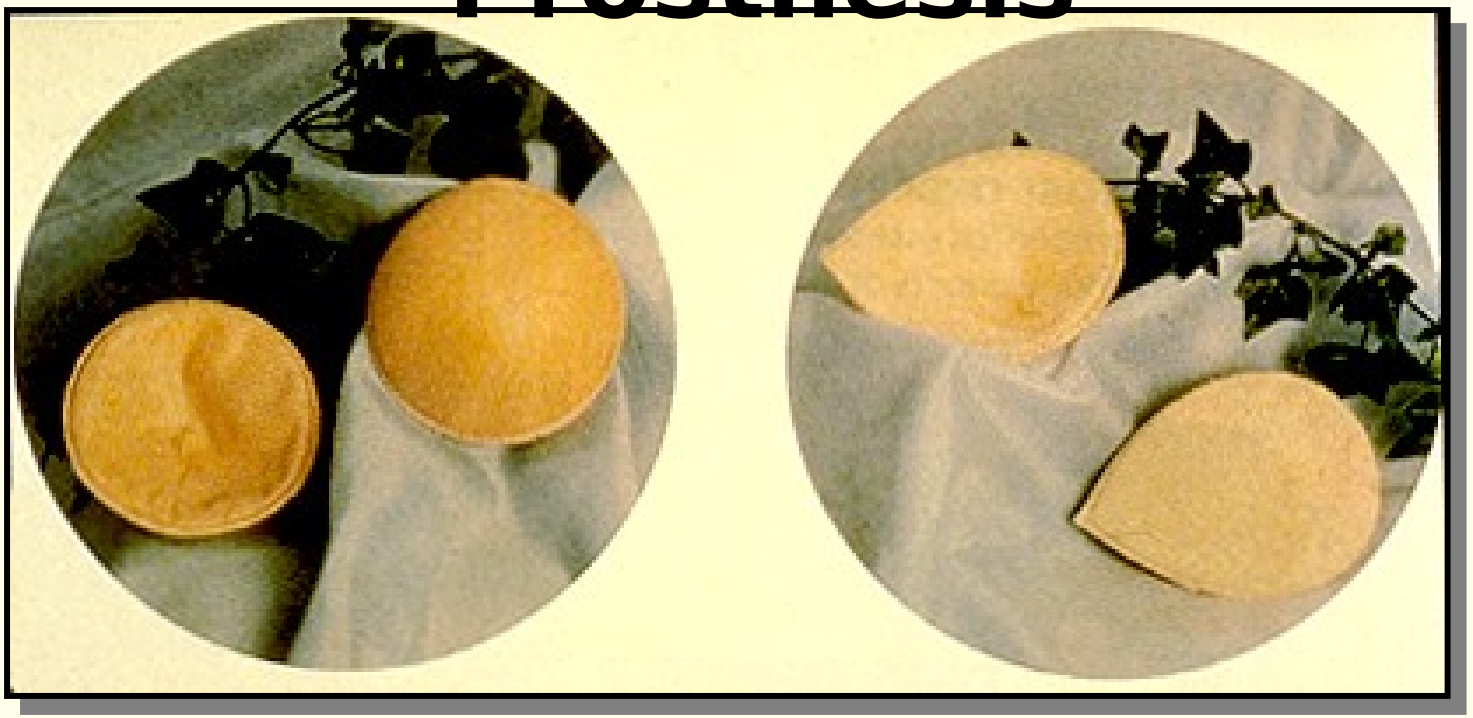
Breast Reconstruction

- **No Reconstruction (external prosthesis)**
- **Immediate or Delayed**

  Reconstruction

  - Autologous tissue
  - Implant

External Prosthesis



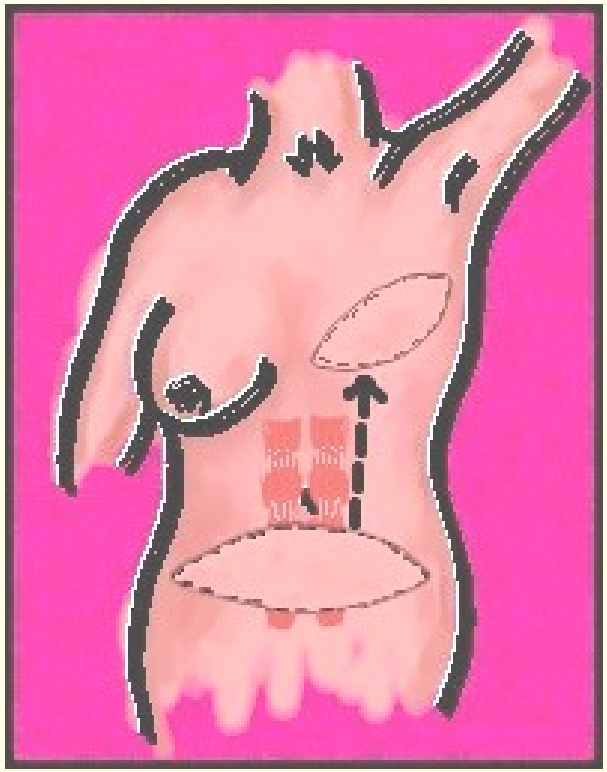
Round Bust Cup Teardrop Bust Cup

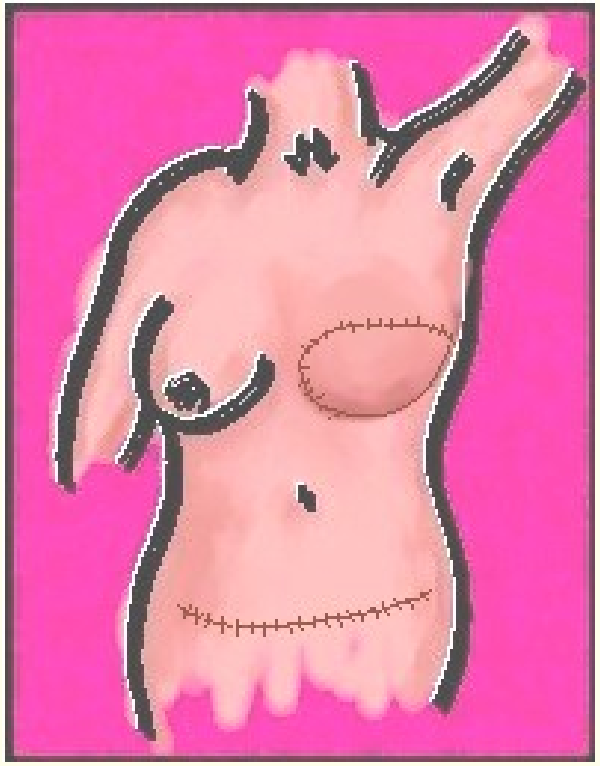
Implant Reconstruction

- Two types of permanent implants
  - Saline
  - Silicone gel
- Most common: combined expander/implant reconstruction
- Implant-only reserved for partial mastectomy or lumpectomy patients

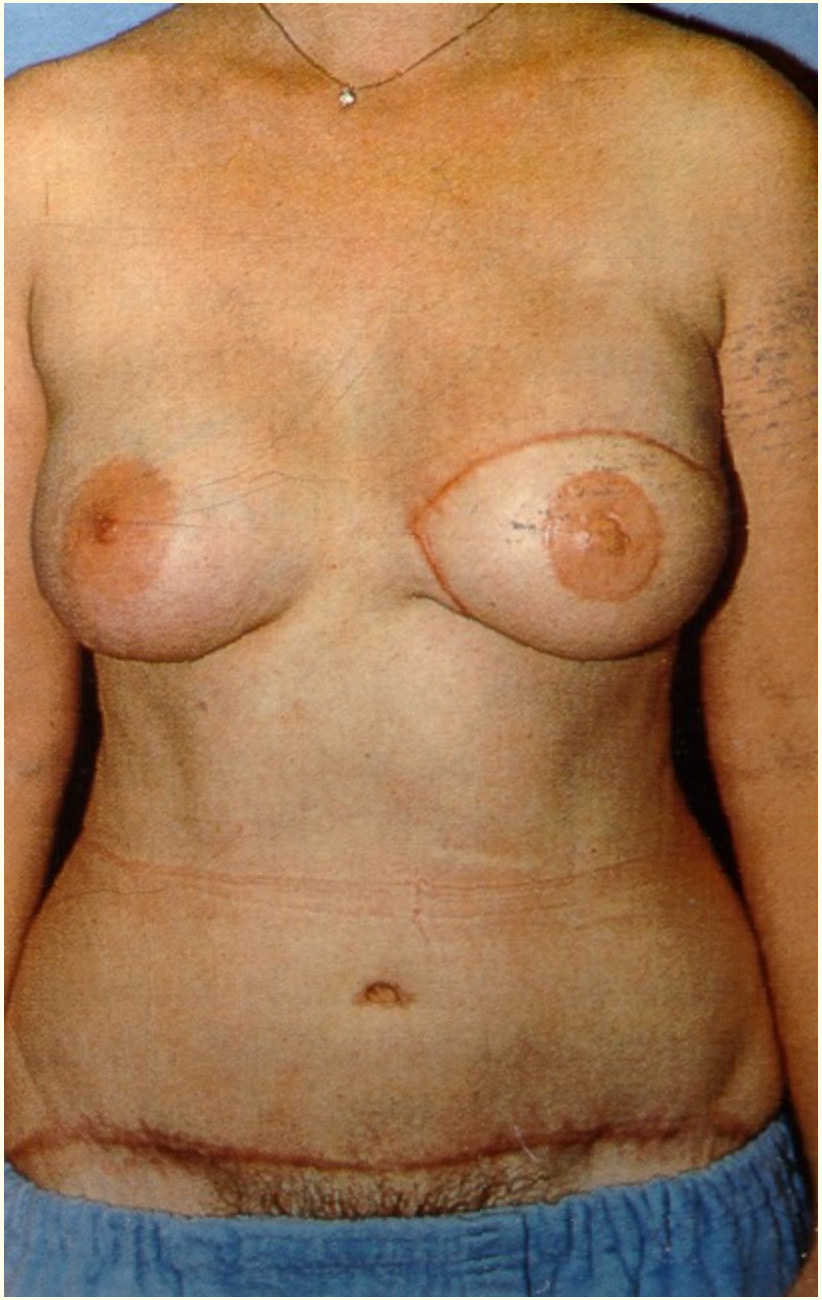
Implant

Transverse Rectus Abdominus Myocutaneous TRAM Flap



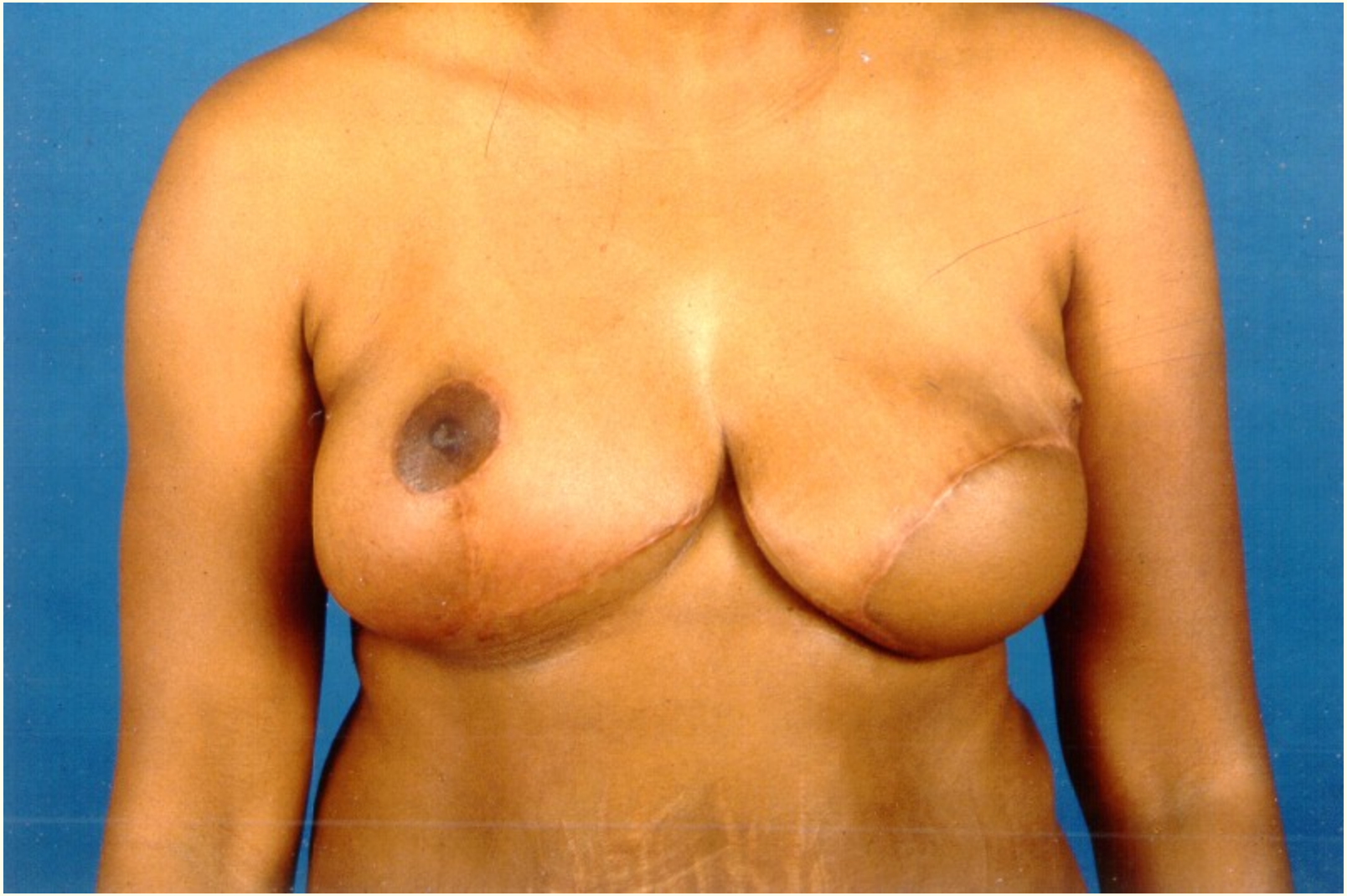


- Most common flap used for reconstruction
- May transferred as a pedicled or free flap
- Abdominal closure results in “tummy tuck” for the patient
- One or both rectus muscles can be taken
- May result in weakness of the abdominal wall

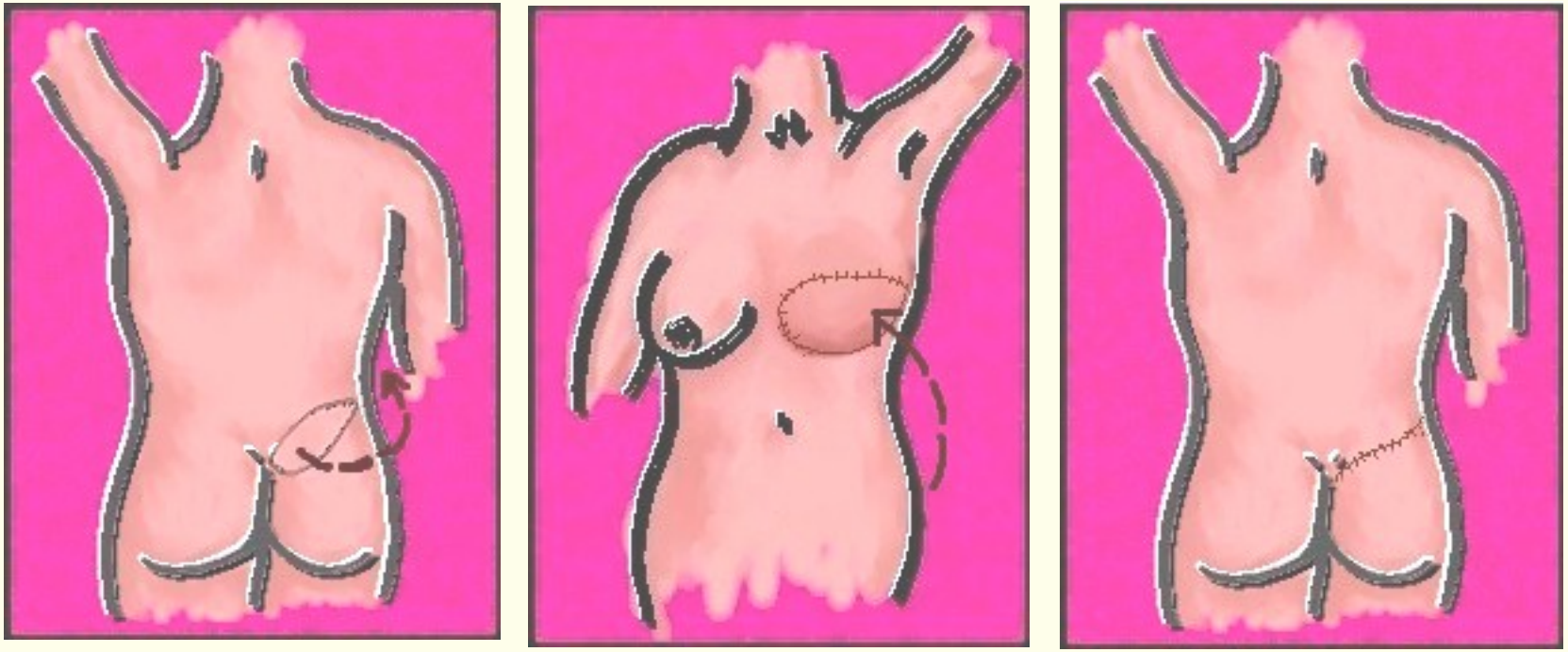


Latissmuss Dorsi Myocutaneous Flap

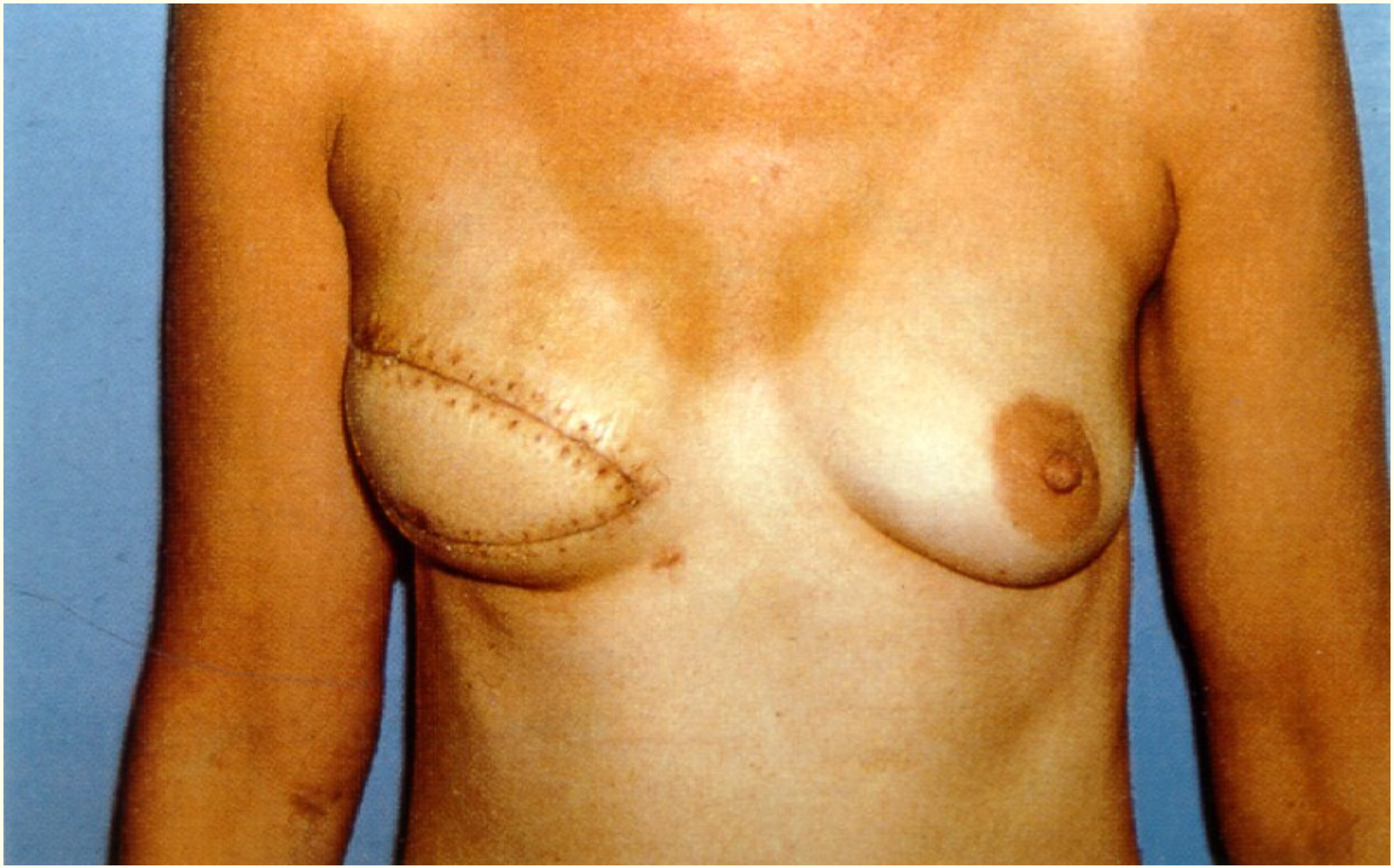
- Oldest type of autologous breast reconstruction
- Recent modifications to improve the scar
- In thinner patients often need implant to match volume of opposite breast
- May cause shoulder weakness



Free Gluteal Flap



- Based on either the superior or inferior gluteal vessels
- Large amount of tissue can be harvested here
- The fat is more difficult to shape



Lymphedema

Lymphedema - Prevention

- Immediate evaluation of swelling, rash, itching, pain, or fever
- Avoid trauma to the affected limb including needle sticks or B/P
- Keep affected arm clean and moisturized
- Wear gloves for housework or gardening
- Avoid extreme temperature changes
- No heavy lifting with the affected arm (< 15 lbs)
- Wear light prosthesis
- Avoid tight jewelry or clothing on arm and tight straps over shoulder or around trunk
- Maintain ideal body weight

Lymphedema Complete Decongestive Therapy (CDT)

- **Treatment Phase**
  - Skin / Nail Care
  - Manual Lymph Drainage (MLD)
  - Compression Bandaging
  - Therapeutic Exercise

Manual Lymph Drainage

Lymphedema Complete Decongestive Therapy (CDT)

- **Maintenance Phase**
  - Skin / Nail Care
  - Self-MLD
  - Compression Garments (Day)
  - Compression Bandaging (Night)
  - Home Exercise Program

Compression Garments

Compression Bandaging

Lymphedema

- **False** Conservative Treatments
  - Diuretics
  - Compression garment alone
  - Compression Pump

Hot Flashes

Hot Flashes

- Caused by a complex interaction between the loss of estrogen and their effect on the neuroendocrine pathway
- Detailed patient history
  - Frequency
  - Severity
  - Effect on the patient’s function
- Hot flash diaries

Non-Pharmacologic Therapy

- Cool clothing, dress in layers, fabric and sheets that let skin breath
- Avoid caffeine, alcohol, spicy foods
- Adequate ventilation
- Aerobic activity
- Yoga or deep breathing exercise
- Drink cold water or juice at start of hot flash

Pharmacologic Therapy

- Women report a 20-30% reduction in frequency of hot flashes with placebo alone in double-blind, randomized trials
- Megace 20 mg BID
  - Journal of Clinical Oncology 1994; 331:347
  - Interaction with breast cancer unknown
- Bellergal S-100
- Aldomet 250 bid

Clonidine

- Clonidine patch
  - Alpha-2 adrenergic agonist (reduces sympathetic outflow from the CNS)
  - Reduces frequency by 44% vs. 27% with placebo; reduces severity by 10%
  - Dry mouth, drowsiness, constipation and itching under patch
  - Journal of Clinical Oncology 1994;12:155-58

Clonidine, cont.

- Clonidine tabs (0.1 mg q HS)
  - 37% reduction vs. 20% with placebo for Tamoxifen induced hot flashes
  - Improved QOL in breast cancer patients with Tamoxifen induced hot flashes
  - No effect on blood pressure
  - Ann Int Med 2000; 132:788

Treatment for Hot Flashes, cont. (Antidepressants)

- Venlafaxine (Effexor™)
  - low doses, 12.5 mg bid, led to 55% of women having a 55% reduction in hot flash score
  - 37.5 mg qd of long acting compound; few side effects
  - Journal of Clinical Oncology 1998;16:2377
- Fluoxetine (Prozac™)
  - 50% vs. 36% decrease in hot flash score
- Paroxetine (Paxil™) also effective
- Sertraline (Zoloft™) not effective

Gabapentin (Neurontin™)

- Structurally similar to inhibitory neurotransmitter GABA
- Phase II trials
  - 40-50% reduction in hot flash frequency
  - Typical dosing regime:
    - 300 mg po QHS x 1 week
    - 300 mg po BID x 1 week
    - 300 mg po TID x 2 weeks
- Side effects: dizziness

Herbal Therapies

- Examples:
  - Dong Quai
    - No better than placebo
    - Fertil Steril 1997;68:981
  - Black cohosh
  - Evening oil of primrose
  - Vitamin E
    - 800 IU per day
    - No better than placebo
    - J Clin Oncol 1998;16:495-500
  - Red clover

- Conflicting data
- Clinical trials ongoing

Phytoestrogens

- Several types of phytoestrogens:
  - Isoflavones (genistein, diadzein)
  - Lignans
  - Cumestans
- Found in soy, alfalfa, red clover, peas, beans, lentils

Phytoestrogens

- Lower risk of breast cancer in populations with a higher intake of phytoestrogens; eg, tofu, miso (Japan)
- Lower reported rates of menopausal symptoms in Asian populations
- Ambigious Laboratory Data
  - In cell culture, may stimulates estrogen receptors and inhibit Tamoxifen
  - Animal data: less aggressive tumors

Phytoestrogens

- Obstet Gynecol 1998;91:6-11

  - Soy isolate, 60 grams/d, reduced hot flashes by

    44% vs. a 31% reduction with placebo

  - This much soy was not easy to take and was

    complicated by constipation

- J Clin Oncol Jan 2000 Mayo Clinic

  - Soy tablets (150 mg isoflavones/d = 3 glasses

Surveillance

Breast Cancer Surveillance

After First Primary Therapy	Careful Hx	Physical Exam	BSE	Mammogram
1st 3 years	Every 3-6 mo	Every 3-6 mo	Monthly	6 months after XRT
Next 2 years	Every 6-12 mo	Every 6-12 mo	Monthly	As indicated
After 5 years	Annually	Annually	Monthly	As indicated

American Society of Clinical Oncology 1998 Update of Recommended Breast Cancer Suveillance Guidelines

Detecting a Local Recurrence

In Women with Breast Preservation:

- Surgical Effects
- Radiation Effects
  - Erythema
  - Lymphedema
  - Radiation Fibrosis

Detecting a Local Recurrence

In Women after a Mastectomy:

- Without Reconstruction
  - Careful inspection of the chestwall and scar site

- With Reconstruction
  - Careful inspection of the TRAM or implant site

Issues for all Women with History of Breast Cancer

Issues for All Women

- Depression
- Fear of Test Results
- Sexuality
- Anxiety of Follow Up Visits
- Post-Mastectomy Reconstruction
- Treatment Anxiety
- Weight Gain
- Lymphedema

Issues for all Women

Emotional Issues

- Fear of Death
- Fear of Disability
- Fear of Dependence on Others for Care and Support
- Fear of Disfigurement

Issues for all Women

Women with Special Needs:

- Those with a family history
- Those diagnosed during pregnancy
- Those never having had children
- Unpartnered women
- Women with prior psychiatric history
- Women with disabilities

Issues for all Women

Sexuality:

- Tied closely to self-esteem
- Many women have sexual concerns and wish to discuss them
- Fear of rejection by partner
- Loss of pleasure from breast caressing
- Vaginal health issues

Premenopausal Women

Premenopausal Women

- Temporary Menopause
- Subsequent Childbirth
- Tamoxifen
- Oophorectomy

Premenopausal Women

Temporary Menopause:

- Induced by chemotherapy
- Causes menopause symptoms
- Closer to age at menopause, more likely it is to be permanent

Premenopausal Women

Subsequent Childbirth:

- Cancer treatment may cause infertility
- No absolute contraindication

Premenopausal Women

Tamoxifen:

- Precipitates post-menopausal symptoms in some
- Must use birth control
  - Teratogenic effects unknown

Premenopausal Women

Oophorectomy:

- May precipitate acute symptoms of menopause
- Consider if patient at increased risk for ovarian carcinoma

Postmenopausal Women

Postmenopausal Women

- Hot Flashes
- Vaginal Dryness
- Cardiac Disease/Osteoporosis
- Changes in emotional equilibrium

Postmenopausal Women

Vaginal Dryness:

- Astroglide
- Replens
- Estring
- Vagifem

Questions?